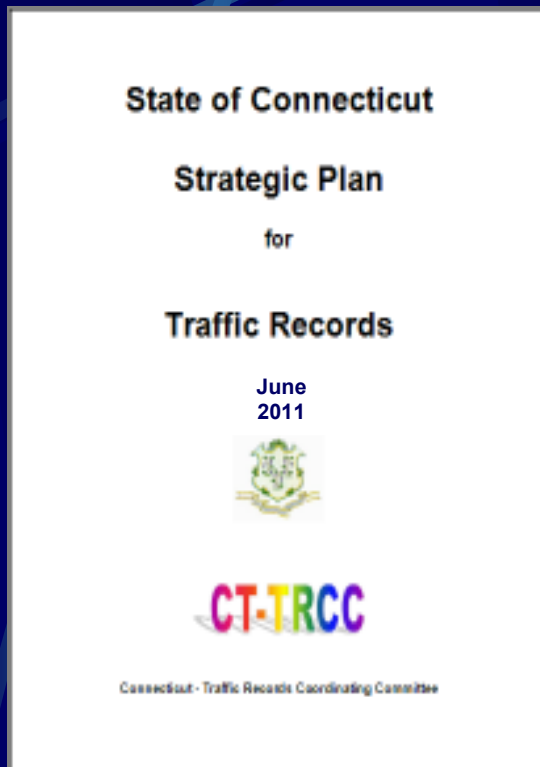




6th Year - Sec 408 Safety Data Projects

6th Year



- E-Statewide Crash Data Repository
- E-Citation Processing System
- E-Citation Pilot - State Law Enforcement
- E-Citation Pilot - Local Law Enforcement (CROCG)
- E-Citation Pilot - Local Law Enforcement (NexGen)
- E-Crash Outcome Data Evaluation System (CODES)

Year 6 - TR Data Project

Safety Data System



E - Statewide Crash Data Repository (CDR)

6th Year Project

The base CDR allows all law enforcement agencies, capturing PR-1 crash data to submit it electronically to a central repository. A browser-based GIS data query and analysis toolset will be available for users to access data, within 30 days of the crash. The CDR will benefit many law enforcement/highway safety users at the Local, State and Nat'l levels. Many agencies are watching with interest how this project continues to unfold.

Progress from 5th Year to-date

- Obtained files from ConnDOT including lane width, pavement, ADT and other roadway data for the last 16 years
- **MOU finalized - preparing to begin receiving electronic PR-1s from DPS**
- Server(s) to store data received from state/local law enforcement and ConnDOT
- **Web portal/GIS query and analysis tools with a summary report option**
- Demonstration of the Crash Data Repository (CDR)
- **Extract of e-Crash reporting to legacy PR-1 data for ConnDOT Crash File**

Build on CDR Success

Following successful pilot testing of new e-Crash reporting; aggressive marketing/training initiative to law enforcement/converting to e-Crash, submitting PR-1 crash data to CDR

Connecticut Crash Data Query Tool

[Login](#)[Register](#)[Contact Us](#)

The Connecticut Crash Data Repository (CTCDR) is a web tool designed to provide access to select crash information collected by state and local police. This data repository enables users to query, analyze and print/export the data for research and informational purposes. The CTCDR is comprised of crash data from two separate sources; The Department of Public Safety (DPS) and The Connecticut Department of Transportation (ConnDOT).

The purpose of the CTCDR is to provide members of the traffic-safety community with timely, accurate, complete and uniform crash data. The CTCDR allows for complex queries of both datasets such as, by date, route, route class, collision type, injury severity, etc. For further analysis, this data can be summarized by user-defined categories to help identify trends or patterns in the crash data.

[Data Query Tool](#)[GIS/Map Based Query Tool](#)

User Guides:

- [Data Query Tool User Guide](#)

Notes to users:

- All personal information in crash data has been removed to protect the identity of those involved.
- Before 2007, property damage only crashes were not reported for local jurisdictions.
- Crash data obtained from ConnDOT is delayed by approximately 1.5 years due to error checks and the need for manual data entry of paper crash reports.
- Route and milepost data assigned by ConnDOT and is not available in the Department of Public Safety dataset.
- DPS crash data is updated weekly and contains only completed crash investigations.
- DPS crash dataset is currently not available, but will be added soon!
- The repository software is in *beta status*. New features are under development and existing components undergo frequent changes. Please excuse any inconvenience ongoing development might cause.
- The repository is optimized for usage with [Firefox 7](#). Full support of other browsers will be added soon.

www.ctcrash.uconn.edu

CTCDR - Contact

Username: ctcdr-user
Password: ctcdr-demo

NHTSA Performance Measure - White Paper

Crash Row of 6 X 6 Table

CRASH DATABASE MODEL PERFORMANCE MEASURES

CRASH DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS	UNIFORMITY	INTEGRATION	ACCESSIBILITY
<p>C-T-1: The median or mean number of days from (a) the crash date to (b) the date the crash report is entered into the database.</p> <p>C-T-2: The percentage of crash reports entered into the database within XX* days after the crash.</p> <p>*e.g., 30, 60, or 90 days</p>	<p>C-A-1: The percentage of crash records with no errors in critical data elements.</p> <p>Example: Crash severity</p> <p>C-A-2: The percentage of in-State registered vehicles on the State crash file with Vehicle Identification Number (VIN) matched to the State vehicle registration file.</p>	<p>C-C-1: The percentage of crash records with no missing critical data elements.</p> <p>C-C-2: The percentage of crash records with no missing data elements.</p> <p>C-C-3: The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value.</p>	<p>C-U-1: The number of MMUCC-compliant data elements entered into the crash database or obtained via linkage to other databases.</p>	<p>C-I-1: The percentage of appropriate records in the crash database that are linked to another system or file.</p> <p>Examples: Crash w/in-State driver linked to Driver file</p> <p>Crash w/EMS response linked to EMS file</p>	<p>C-X-1: To measure accessibility:</p> <ul style="list-style-type: none"> Identify the principal users of the crash database Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request Document the method of data collection and the principal users' responses

Year 6 - TR Data Project

Safety Data System



E - Citation Processing System

Objective/Expected Impact/Judicial

The receipt of electronically (e) captured citation data by the CIB, leading to the data being automatically populated into the CIB automated system. An e-Citation Processing System will create efficiencies in several areas.

Phase One - officer handwriting is being replaced by type-written characters, eliminating entry errors. Fewer entry errors results in less exception processing, which improves the timeliness of down stream transmissions to the Courts and the DMV.

Phase Two - including activities to allow for the direct population of the CIB database, will further minimize data entry, key stroke errors, and exception processing.

Phase Three - will allow for the expansion of e-Citation processing, further developing the application to accommodate Commercial Citations, and the electronic viewing and disposition of citations in court locations. Will also begin the development of an e-Citation paperless courtroom with dedicated dockets for citations and will enhance the availability of electronic, self-pay opportunities.

Year 6 - TR Data Project

Safety Data System



E - Citation Processing System

Executive Overview

- **Background**; CIB; Unified Court System; 250 LE Agencies; 400,000 Tickets per Year; Lock Box Payment
- **Objectives**; Timeliness; Accuracy; Technical Agility to Respond to Public Policy Changes; Better Performance Measures
- **Manual** Limitations; Ticket Inventory; Road Conditions; Legislative Change; Legibility; Arithmetic Errors
- **Timeframe** Analysis for Ticket Returns
- **Ticket Errors**; Wrong Amount Due; Wrong Infraction Number; Wrong Amt for Infraction
- **Successes**; Collaboration; Proof of Concept Widely Accepted; First Utilization of e-Signature; Impetus for e-Pay/Plead
- **Challenges**; Broaden User Base; Demand for Multi-Uses for Mobile Printer; Crash Info Exchange, Summons, Parking Tickets, Warnings

Year 6 - TR Data Project

Safety Data System



E - Citation Processing System

Application

- Overview; Software; In-Car Equipment; Data Communications Network; Citation Forms/Zebra Printer
- **Rollout**; # Printers; LE Agencies; Thermal Paper; Train-the-Trainer; Feedback from Pilot
- **Mgmt Reports**; Monthly by Officer; by Violation Type; by Loca; Separ Data Set - Map Based Analysis
- **Preparation** for Each Agency; Equipment/Software in Veh; Regis ORI with e-Citation; Test System; Train Officers
- **CAPTAIN** Users/e-Citation; Windows Style e-Citation Interface; Main Menu Functions
- **New Citation**; Citation Search; Print; User Preferences; Clear Search Queues
- **Process**; Demographics; License/Veh; Specifics; Infractions/Fines; Notes; Preview; Sign-Save-Print
- **Successes**; User Accepts; App Sharing Across Jurisdictions; Potential for Other Mobile Ticket Apps
- **Challenges**; Budget Limits Broader Rollout; Towns Slow to Rollout "Seed" Units; Long Term Issue of Replacement Costs; Revenue Sharing to Cover Costs - Strong Potential

Year 6 - TR Data Project

Safety Data System



E - Citation Pilots

Objective/Expected Impact/State Police/CRCOG/NexGen

Continued roll-out of e-citation applications for the Connecticut State Police as well as local law enforcement. Expected impacts include a reduction in data input errors, an improvement in the completeness of the collected data, and overall improvement in police officer efficiency by reducing the amount of time that officers spend collecting citation data as well as the time it takes this data to be received by the courts.

The number of tickets issued will continue to increase as additional municipalities join in. Delays and errors will be reduced to near zero as automated population of the CIB infractions database is brought online.

Year 6 - TR Data Project

Safety Data System



E - Citation Pilot - State Law Enforcement

This project continues the roll out of e-citation systems for the State Police. A law enforcement server interface provides linkage for law enforcement to query driver licensing and vehicle registration data, populating the e-citation. Once the officer has generated an e-citation (over 60,000 e-citations to-date), it is electronically sent to the Centralized Infractions Bureau's automated system.

Performance Improvements

- **State Police**; 1100 Troopers; Primary Law Enforcement - all Limited Access Highways; Exclus Jurisdiction in 61 Largely Rural Towns; Concurrent Jurisdiction in all 169 Towns; Every Troop is Assigned a Vehicle with a Mobile Data Computer
- **Hand Written** vs. e-Citations
60% Increase (select Time Period) e-Citations Issued vs. Written
- **Successes**; Extraordinarily Efficient (4-7 Minutes Per Citation); Substantial Potential for Revenue Enhancement; Wide Acceptance; Common Approach Sponsored by Judicial
- **Challenges**; > 500 Printers Needed; Furnish All Vehicles and Create a Uniform Process; Training; Need to Formalize; Bigger Classes Needed; Budget Issues

Year 6 - TR Data Project

Safety Data System



E - Citation Pilot - Local Law Enforcement

This project continues the roll out of e-citation and e-crash systems in law enforcement agencies. This project is helping to improve police officer efficiency by reducing the amount of time officers spend collecting citation/crash data and decreasing the time it takes this data to be received by the appropriate State agency.

Progress to-date

- Continuing to issue printers, software, training materials, and user manuals for e-Citation to police departments
- Participating agencies have the ability to immediately reference motor vehicle statutes; swipe or scan operator license information; integrate DMV operator and registration information into the citation; and print a citation for the violator, and forward an electronic copy to Judicial for processing
- e-Citation speeds the citation-writing process, reduces errors in both citation writing and record-keeping steps, and increases the completeness of collected data
- When crash data is integrated into the mobile application, timeliness, accuracy and completeness will extend to that procedure as well; towns will have access to the data and be able to make informed decisions about spending funds for safety improvements

NHTSA Performance Measure - White Paper

Citation Row of 6 X 6 Table

CITATION/ADJUDICATION DATABASE MODEL PERFORMANCE MEASURES

CITATION/ADJUDICATION DATABASE					
TIMELINESS	ACCURACY	COMPLETENESS*	UNIFORMITY*	INTEGRATION*	ACCESSIBILITY*
<p>CIA-T-1: The <i>median</i> or <i>mean</i> number of days from (a) the date a citation is issued to (b) the date the citation is entered into the statewide citation database, or a first available repository.</p> <p>CIA-T-2: The <i>median</i> or <i>mean</i> number of days from (a) the date of charge disposition to (b) the date the charge disposition is entered into the statewide adjudication database, or a first available repository.</p> <p>Note: Many States do not have statewide databases for citation or adjudication records. Therefore, in some citation and adjudication data systems, timeliness and other attributes of data quality should be measured at individual first available repositories.</p>	<p>CIA-A-1: The <i>percentage</i> of citation records with no errors in <i>critical</i> data elements.</p> <p>Example: Time Citation Issued</p> <p>CIA-A-2: The <i>percentage</i> of charge disposition records with no errors in <i>critical</i> data elements.</p> <p>Example: Citation reference number</p>	<p>CIA-C-1: The <i>percentage</i> of citation records with no missing <i>critical</i> data elements.*</p> <p>CIA-C-2: The <i>percentage</i> of citation records with no missing data elements.*</p> <p>CIA-C-3: The <i>percentage</i> of unknowns or blanks in <i>critical</i> citation data elements for which unknown is not an acceptable value.*</p>	<p>CIA-U-1: The <i>number</i> of Model Impaired Driving Record Information System (MIDRIS)-compliant data elements entered into the citation database or obtained via linkage to other databases.</p> <p>CIA-U-2: The <i>percentage</i> of citation records entered into the database with common uniform statewide violation codes.</p>	<p>C-I-1: The <i>percentage</i> of appropriate records in the citation file that are linked to another system or file.</p> <p>Example: DWI citation linked to Adjudication file</p>	<p>CIA-X-1: To measure accessibility of the citation database:</p> <ul style="list-style-type: none"> Identify the principal users of the citation database Query the principal users to assess (a) their ability to obtain the data or other services requested and (b) their satisfaction with the timeliness of the response to their request Document the method of data collection and the principal users' responses
*These measures of completeness, uniformity, integration, and accessibility are also applicable to the adjudication file.					

Year 6 - TR Data Project

Safety Data System



Crash Outcome Data Evaluation System (CODES)

CODES presented to TRCC; Application in a National Webinar - 2011

- 2010-2011 Interim Progress Report (IRP) submitted for the 2011 Section 408 application **Integration** (Performance Area) for **EMS/Injury Control** (System).
- CT CODES has Hospitalization & Emergency Department (ED) Visit data linked with MV Crash data for the years 2000-2007 (CODES version 8 software). Plans for linking 2008 Crash with Hospitalization & ED Visit data underway
- **CODES e-tracks victims of a MV crash from the scene through the health care system to determine crash outcome in terms of mortality, injury, severity and health care cost**
- CT CODES is working with NHTSA, and the Universities of Utah, and Maryland to generate de-identified CT CODES data for 2005. Plans are for NHTSA to use the CT data along with data from other CODES states as a General Use Model for multi-states data analyses. Additional years of data will follow
- **CODES initiative has a primary objective - to use data linkage in pursuit of traffic safety by providing data/analyses to support State and Federal programmatic decisions**
- Connecticut Children Medical Center Injury Prevention Center; Yale-New Haven Children's Hospital Injury Free Coalition for Kids - use CODES data to examine traffic safety issues that could prevent motor vehicle injuries or deaths.